

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Oscar Johannes Maria **GODDIJN**, et al
For: **REGULATING METABOLISM BY MODIFYING THE LEVEL OF TREHALOSE-6-PHOSPHATE**
Attorney Docket No.: U 014765-8

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

We draw the attention of the Examiner to the references listed on the attached Form PTO-1449. Copies of the references are not required, because they were already filed in a U.S. application from which an earlier filing date is claimed in this application.

Respectfully submitted,

CLIFFORD J. MASS
LADAS & PARRY
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NEW YORK, NEW YORK 10023
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ATTY. DOCKET NO.

SERIAL NO.

U 014765-8

APPLICANT

GODDIJN, Oscar, Johannes, Maria et al.

FILING DATE

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REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER							DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	6	1	3	3	0	3	4	10/2000	Strom, et al.	435	419	
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	AL	9	3	1	7	0	9	3	09/1993	WO				
	AM	9	6	0	0	7	8	9	01/1996	WO				
	AN	0	4	5	1	8	9	6	10/1991	EP				
	AO	9	5	0	1	4	4	6	01/1995	WO				
	AP	9	6	1	7	0	6	9	06/1996	WO				

OTHER ART (Including Author, Title, Date, Pertinent Dates, Etc.)

	AR	Goddijn, O.J.M. et al. "Transgenic Tobacco Plants as a Model-System for the Production of Trehalose" <u>Plant Physiology</u> , vol. 108, no. 2 (June 1, 1995), p.149
	AS	Jang, J. C. et al. "Sugar Sensing in Higher Plants" <u>Plant Cell</u> , vol. 6 (November 1994), pp. 1665-1679
	AT	Lu, X. et al. "Differentiation of HT-29 Human Colonic Adenocarcinoma Cells Correlates with Increased Expression of Mitochondrial RNA: Effects of Trehalose on Cell Growth and Maturation." <u>Cancer Research</u> , vol. 52 (July 1992), pp. 3718-3725

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	AO	0	5	3	0	9	7	8	03/1993	EP				
	AP	0	4	4	2	5	9	2	08/1991	EP				

OTHER ART (Including Author, Title, Date, Pertinent Dates, Etc.)

	AR	Holmstrom, K.O. et al. "Drought tolerance in plants" <u>Nature</u> , vol. 379 (February 22, 1996), pp. 683-684											
	AS	Blaquez, M. A. et al. "Trehalose-6-phosphate, a new regulator of yeast glycolysis that inhibits hexokinases" <u>Febs Letters</u> , vol. 329, no. 1, 2 (1993), pp. 51-54											
	AT	Hohmann, S. et al. "Evidence for trehalose-6-phosphate -dependent and -independent mechanisms in the control of sugar influx into yeast glycolysis." <u>Molecular Microbiology</u> 20 (5) (1996), pp. 981-991											

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	AO	9	7	4	2	3	2	7	11/1997	WO				
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	AR	Luyten, K. "Functional Analysis of the Yeast Genes GGS1/TPS1, Encoding a Subunit of the Trehalose Synthase Complex, and FPS1, Encoding a Glycerol Facilitator (Saccharomyces Cerevisiae)" Dissertation Abstracts International, vol. 58, no. 1C (1996), p. 105. Order No. AARC537180. Abstract.											
	AS												
	AT	Kaasen, I. et al. "Analysis of the otsBA operon for osmoregulatory trehalose synthesis in Escherichia coli and homology of the OtsA and OtsB proteins to the yeast trehalose-6-phosphate synthase/phosphatase complex" Gene, vol. 145 (1994), pp. 9-15											

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	AR	Newman, T. et al. "11536 Arabidopsis thaliana cDNA clone 151A11T7" EMBL Sequence Database, Release 43 (March 25, 1995)									
		Accession No. T76758									
	AS	Newman, T. et al. "13527 Arabidopsis thaliana cDNA clone 170D15T7" EMBL Sequence Database, Release 44 (June 4, 1995)									
		Accession No. R65023									
	AT	Newman, T. et al. "11168 Arabidopsis thaliana cDNA clone 149K12T7" EMBL Sequence Database, Release 44 (June 4, 1995)									
		Accession No. T76390									

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	AR	Newman, T. et al. "15707 Arabidopsis thaliana cDNA clone 183N13T7" EMBL Sequence Database, Release 44 (July 27, 1995) Accession No. H37578
	AS	Newman, T. et al. "6714 Arabidopsis thaliana cDNA clone 117M5T7" EMBL Sequence Database, Release 42 (February 3, 1995) Accession No. T43451
	AT	Newman, T. et al. "15723 Arabidopsis thaliana cDNA clone 183P18T7" EMBL Sequence Database, Release 44 (July 27, 1995) Accession No. H37594
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	AR	Minobe, Y. et al. "Rice cDNA, partial sequence (C10408-1A)" EMBL Sequence Database, Release 37 (November 27, 1993) Accession No. D22143
	AS	Sasaki, T. et al. "Rice cDNA, partial sequence (S1776-1A)" EMBL Sequence Database, Release 41 (November 13, 1994) Accession No. D40048
	AT	Minobe, Y. et al. "Rice cDNA, partial sequence (C10773-1A)" EMBL Sequence Database, Release 37 (November 27, 1993) Accession No. D22344

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	AR	Zentella, R. et al. "Molecular Characterization of a cDNA Encoding trehalose-6-Phosphate Lepidophylla Synthases/phosphatase from the resurrection plant selaginella" <u>Plant Physiology</u> , vol. 111, no. 2 (June 1996), p. 47
	AS	Gancedo, C. et al. "A.thaliana mRNA for trehalose-6-phosphate synthase" EMBL Sequence Database, Release 51 (March 1, 1997), Accession No. Y08568
	AT	Goddijn, O.J.M. et al. "Inhibition of trehalase activity enhances trehalose accumulation in transgenic plants." <u>Plant Physiology</u> (Rockville) 113 (1) (1997) pp. 181-190

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	AR	Thevelein, J.M. "Trehalose synthase: guard to the gate of glycolysis in yeast?" Trends in Biochemical Sciences, vol. 20, no. 1 (January 1995), pp. 3-10
	AS	De Virgilio, C. et al. "Disruption of TPS2, the gene encoding the 100-kDa subunit of the trehalose-6-phosphate synthase/phosphatase complex in Saccharomyces cerevisiae, causes accumulation of trehalose-6-phosphate phosphatase activity" Eur. J. Biochem., vol. 212 (1993), pp. 315-323

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AR	Foyer, C.H. et al. "Modifications in Carbon Assimilation, Carbon Partitioning and Total Biomass as a Result of Over-Expression of Sucrose Phosphates Synthase in Transgenic Tomato Plants" <u>Plant Physiology</u> , vol. 105, no. 1 (May 1, 1994), p. 23
AS	Kossmann, J. et al. "Reduction of the Chloroplastic Fructose-1, 6-Bisphosphatase in Transgenic Potato Plants Impairs Photosynthesis and Plant Growth" <u>Plant Journal</u> , vol. 6, no. 5 (November 1, 1994), pp. 637-650
AT	Hajirezaei, M. et al. "Transgenic potato plants with strongly decreased expression of pyrophosphate: fructose-6-phosphate phosphotransferase show no visible phenotype and only minor changes in metabolic fluxes in their tubers." <u>Plant</u> , vol. 192(1994), pp. 16-30

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	AR	Trathewey, R. et al. "Transgenic approaches to improving the flux of carbohydrate into potato tubers." International Conference on the Transport of Photoassimilates, Canterbury, England, UK, August 13-17, 1995. <u>Journal of Experimental Botany</u> 47 (Spec. Issue) (1996)
	AS	Vogel, et al., <u>Plant Journal</u> Vol. 13(5), (1998), pp 673-683
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